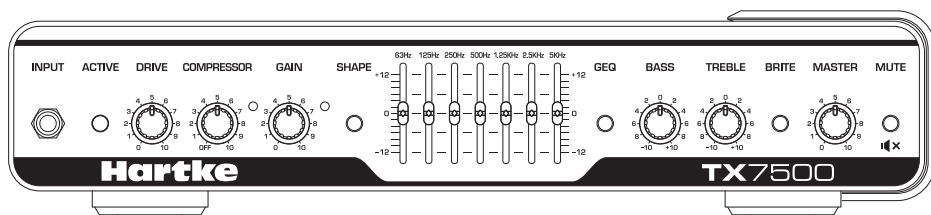


Hartke

TX7500 BASS AMPLIFIER



Owner's Manual

Important Safety Information



ATTENTION
RISQUE DE CHOC ÉLECTRONIQUE -
NE PAS OUVRIR



This lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of non-insulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance instructions in the literature accompanying the appliance.

WARNING: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.



Protective earthing terminal. The apparatus should be connected to a mains socket outlet with a protective earthing connection.

FCC Notice

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user’s authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.



If you want to dispose this product, do not mix it with general household waste. There is a separate collection system for used electronic products in accordance with legislation that requires proper treatment, recovery and recycling.

Private household in the 27 member states of the EU, in Switzerland and Norway may return their used electronic products free of charge to designated collection facilities or to a retailer (if you purchase a similar new one).

For Countries not mentioned above, please contact your local authorities for a correct method of disposal.

By doing so you will ensure that your disposed product undergoes the necessary treatment, recovery and recycling and thus prevent potential negative effects on the environment and human health.

Important Safety Information

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at the plugs, convenience receptacles, and at the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug the apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified personnel. Service is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. This appliance shall not be exposed to dripping or splashing water and that no object filled with liquid such as vases shall be placed on the apparatus.
16. Caution-to prevent electrical shock, match wide blade plug wide slot fully insert.
17. Please keep a good ventilation environment around the entire unit.
18. No naked flame sources, such as lighted candles, should be placed on the apparatus.
19. Do not install this equipment in a confined or building-in space such as a book case or similar unit, and remain a well ventilation conditions at open site. The ventilation should not be impeded by covering the ventilation openings with items such as newspaper, table-cloths, curtains etc.
20. This apparatus is for professional use only.
21. The apparatus is intended to be used in moderate climates.
22. **WARNING:** For the terminals marked with symbol of “⚡” may be of sufficient magnitude to constitute a risk of electric shock. The external wiring connected to the terminals requires installation by an instructed person or the use of ready-made leads or cords.
23. **Class 2 wiring:** To reduce the risk of electric shock, The external wiring connected to the terminals marked with “class 2 wiring” requires installed with class 2 wiring by an instructed person or the used of ready-made leads or cords.
24. The mains plug/appliance coupler is used as disconnect device, the disconnect device shall remain readily operable.



Introduction

Congratulations on your purchase of the Hartke TX7500 Bass Amplifier!

The Hartke TX7500 is a lightweight Class D bass amplifier that offers Hartke's classic preamp circuitry in a highly portable design. While these amplifiers are designed for easy operation, we recommend taking a few moments to review this guide to fully understand the unique features we've incorporated.

The TX7500 features a 7-band Graphic EQ, independent Bass and Treble controls with Hartke's classic Shape and Brite tones, as well as onboard overdrive and compression. Its aluminum chassis is both rugged and lightweight, making it the perfect amplifier for taking on the road.

It is equipped with both 1/4" and twist-and-lock speaker output jacks for connecting your speaker cabinets. The TX7500 also provides multiple options for signal routing, including a Direct Output and an FX Loop (Preamp Out / Power Amp In). You'll find the TX7500 is an ideal choice for every performance situation—from the studio to the stage.

This guide contains descriptions of the TX7500's features as well as instructions for setup and operation. A registration card is enclosed—please follow the instructions to receive online technical support and to stay updated on this and other Hartke products. You can also visit our website at hartke.com for complete product information.

We recommend keeping the following records for your reference, along with a copy of your sales receipt:

Serial number: _____

Date of purchase: _____

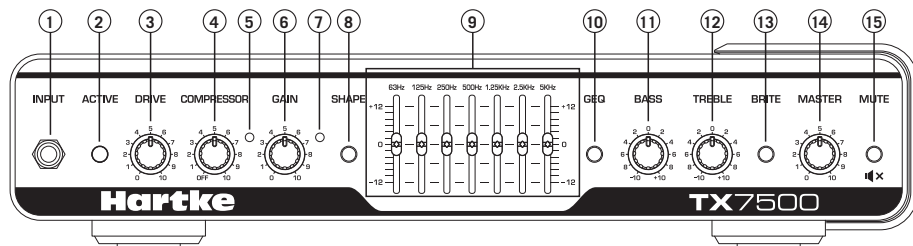
With proper care and maintenance, the TX7500 bass amplifier will provide years of trouble-free operation. If your amplifier requires servicing, you must obtain a Return Authorization (RA) number before shipping it to Hartke. Units sent without an RA number cannot be accepted.

Please call Hartke at 1-800-372-6766 to obtain an RA number prior to shipping your unit. Retain the original packing materials and, if possible, return the amplifier in its original carton. If your Hartke TX7500 was purchased outside of the United States, please contact your local distributor for warranty details and service information.

Features

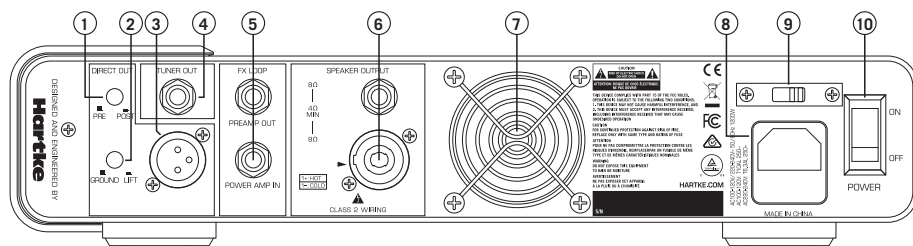
- Lightweight bass amplifier head delivering **800W continuous power @ 4Ω**
- Compact **8.5 lb** chassis with integrated carry handle
- **7-band Graphic EQ** with independent **Bass** and **Treble** controls
- Variable **Drive** and **Compressor** circuits
- Classic Hartke **Shape** and **Brite** circuits
- **FX Loop**, **XLR Direct Out (Pre/Post)**, and **1/4" Tuner Out**

Front Panel Callouts



1. **INPUT** – Connect an active or passive bass via a 1/4" cable. Accepts any bass, including instruments with dual 9V active preamps.
2. **ACTIVE Switch** – Selects active or passive bass (illuminates yellow when active).
3. **DRIVE Knob** – Adjusts the amount of overdrive applied to the input signal.
4. **COMPRESSOR Knob** – Sets the amount of compression by adjusting the threshold level. The compressor allows you to control the overall dynamic range of your performance by reducing sudden peaks and increasing the sustain of the instrument. At the fully counterclockwise position (OFF), no compression is applied. Turning the knob clockwise increases the amount of compression.
5. **Compression Indicator** – Provides a visual indicator of the status of the compression circuitry. This yellow LED lights when the input signal crosses above the threshold level and activates the compressor circuit. Below the threshold, the LED illuminates green. When the control is fully counterclockwise (OFF), the LED is unlit.
6. **GAIN Knob** – Sets the signal level sent to the PREAMP OUT, including the TUNER OUT and DIRECT OUT (when the POST switch is active). See Rear Panel Callouts on page 6 for details. Set the gain control first to optimize levels for your playing style and instrument. Then use the MASTER control to set the overall volume.
7. **Peak Indicator** – This red LED illuminates when clipping occurs in the preamp signal path. If you notice that the Peak LED is continuously lighting, turn the GAIN control down.
8. **SHAPE Switch** – When pressed, it activates a special equalization curve, the Hartke sound, that is designed to enhance the sound of your bass instrument (illuminates white when active).
9. **GRAPHIC EQUALIZER** – Seven-band EQ providing ± 12 dB of boost or cut at 63 Hz, 125 Hz, 250 Hz, 500 Hz, 1.25 kHz, 2.5 kHz, and 5 kHz. Center (0) indicates no boost or cut. Raising a slider boosts its frequency band; lowering it attenuates that band. See About Equalization on pages 10–11.
10. **GEQ Switch** – When pressed (white backlight on), the Graphic EQ is active. When unpressed (light off), it is bypassed. This allows you to create a preset EQ curve and toggle it on/off with a single button.
11. **BASS Control** – This control is used to adjust the low frequency shelf EQ ± 10 dB.
12. **TREBLE Control** – This control is used to adjust the high frequency shelf EQ ± 10 dB.
13. **BRITE Switch** – Engages the BRITE circuit, adding a preset EQ contour to enhance high-frequency clarity. The switch illuminates white when active.
14. **MASTER Knob** – Controls the overall volume of the amplifier.
15. **MUTE Switch** – When engaged, the switch illuminates red and mutes all outputs from the amplifier.

Rear Panel Callouts



- 1. DIRECT OUT PRE/POST Switch** – When pressed (POST), the switch lights yellow, indicating POST mode. In this mode, the signal routed to the direct output is taken after the preamp stage, so all front-panel controls—including EQ, other processing, and the rear-panel POWER AMP IN jack (FX LOOP return)—affect the signal sent to the PA or other system. When the switch is left unpressed (PRE), the direct output is taken before the EQ and other signal processing, but after the ACTIVE switch, providing a clean DI signal directly from the input jack.
- 2. DIRECT OUT GROUND/LIFT Switch** – When pressed in (the LIFT position), pin 1 is removed from the chassis. This should be used only if a ground loop hum or buzz is heard. Otherwise, leave it in the out (GROUND) position.
- 3. DIRECT OUT Jack** – Electronically balanced XLR output for sending the TX7500's signal to a mixing console, PA system, or external amplifier. The DIRECT OUT can operate pre-EQ (unaffected by onboard EQ) or post-EQ (affected by onboard EQ), depending on the PRE/POST button (see item 1 above).
- 4. TUNER OUT Jack** – Provides an isolated signal from your bass instrument for connecting to external tuners in a rack or pedalboard setup.
- 5. FX LOOP PREAMP OUT / POWER AMP IN Jacks** – Use these jacks to connect external effects processors or signal-routing equipment. The PREAMP OUT may also be used to send signal to a mixer or recording device.
- 6. SPEAKER OUTPUT** – Use these outputs to connect speakers to the amplifier output. The amplifier provides both 1/4" and twist-and-lock output connectors, wired in parallel. It is recommended to use the twist-and-lock jack whenever possible. The total impedance of the speakers connected to all of the jacks must not be less than 4Ω.
- 7. FAN** – The variable speed fan provides vital cooling to the amplifier. Make sure it is kept free of all obstructions and that cool, fresh air is always accessible.
- 8. AC Input with Fuse Sled** – Connect the supplied 3-pin IEC cable. Includes fuse holder for the amplifier. Make sure the voltage rating is correctly set before powering up the amplifier.
- 9. AC Voltage Selection** – Selects the amplifier operating voltage. Ensure the selector is set correctly for your region before connecting to AC power (set to 115 for 100–120VAC 50/60Hz or set to 230 for 220–240VAC 50/60Hz). Connect only to a mains socket with voltage matching the selected setting. Fuse ratings differ by voltage; the installed fuse corresponds to the factory-set voltage. If changing the voltage setting, the mains fuse must be replaced with the correct rating as specified on the unit. Voltage selection and fuse replacement should be performed by qualified personnel only.
- 10. POWER** – Internally illuminated rocker switch for powering the TX7500 on or off. The switch lights when the unit is powered.

Quick Start

Setting up your Hartke TX7500 Amplifier is a simple process that takes only a few minutes.

1. Remove all packing materials (save them in case servicing is needed in the future) and determine the amplifier's placement. To avoid overheating, ensure the rear-panel fan is unobstructed and that adequate ventilation is available around the entire unit.
2. Connect your bass cabinet(s) to the twist-and-lock or 1/4" speaker output connectors on the rear panel. Any properly rated cabinets with a **minimum total impedance of 4Ω** may be used.
 - For 1/4" outputs: connect the **tip** of the speaker cable to the loudspeaker's "+" (hot) input and the **sleeve** to the "—" (ground) input.
 - For twist-and-lock outputs: connect **+1** to the loudspeaker's "+" input and **-1** to the "—" input.
3. Connect the 3-pin IEC AC power cable to a grounded AC outlet. Do not turn the amplifier on yet.
4. Using a standard shielded instrument cable, connect your bass to the **INPUT** jack on the front panel. Set the following initial front-panel controls:
 - **MASTER**: 12 o'clock
 - **GAIN**: fully counterclockwise ("0")
 - **COMPRESSOR**: fully counterclockwise ("0")
 - **EQ controls**: 12 o'clock
5. Press the rear-panel **POWER** switch to turn on the amplifier.
6. Set your bass's output to maximum. While playing, slowly raise the **GAIN** control until the desired level is reached. If distortion is heard—even with a low MASTER setting—reduce the GAIN or lower the bass output level. Persistent distortion may indicate a faulty cable.
7. After setting GAIN and MASTER volume, adjust your tone. Set the **DRIVE** and **EQ** controls to taste. When you find an EQ curve that suits your instrument and playing style, consider noting it for future reference.
8. Test the compression circuit. As you rotate the **COMPRESSOR** knob clockwise, the bass signal becomes increasingly compressed. Peak sounds (such as slaps and pops) will become more controlled relative to normal playing dynamics. This reduces overall dynamic range but evens out your signal across all registers.
9. If using an external effects processor, turn the amplifier off briefly. Connect a standard audio cable from **FX LOOP PREAMP OUT** to your processor's input, and another cable from the processor's output to the **POWER AMP IN** jack. Turn the amplifier back on and adjust your effects processor settings.

For best performance, set the input and output gain of all connected processors to **0 dB (unity gain)** so the overall signal level remains unchanged when effects are engaged or bypassed.

Choosing the Correct Speaker Cabinets

When selecting a speaker cabinet for your Hartke TX7500 Amplifier, several specifications should be considered—such as impedance, power handling, and frequency response. Among these, impedance often raises the most questions.

Impedance refers to the amount of current that will flow through a speaker at a given voltage and is measured in Ohms (Ω). Because a speaker's impedance varies across frequencies, we use the term **nominal impedance**, which represents the approximate impedance at a reference frequency.

Typical speaker cabinets are rated at **4Ω**, **8Ω**, or **16Ω**. In general, **lower-impedance speakers draw more power** from an amplifier. For example, a 4Ω cabinet will extract more power than an 8Ω cabinet from the same amplifier.

However, **connecting a total speaker load below the amplifier's minimum rated impedance (4Ω for the TX7500)** can cause overheating and potentially damage the output stage.

Most amplifier speaker outputs and cabinet inputs are wired **in parallel**, so it is important to understand how impedance changes in parallel connections.

Parallel Impedance Formula

When speakers are connected in parallel, total impedance decreases. The formula for calculating total load is:

$$1 / R_t = 1 / R_1 + 1 / R_2 + 1 / R_3 + \dots + 1 / R_n$$

Where **R** is the impedance of each speaker cabinet.

If all cabinets share the same impedance rating, the total impedance is simply:

$$\text{Single cabinet impedance} \div \text{Number of cabinets}$$

Example:

Two 4Ω cabinets in parallel $\rightarrow 4\Omega \div 2 = 2\Omega$ (Too low for the TX7500)

Because impedance drops quickly as additional parallel cabinets are added, always verify that your configuration does **not** fall below the amplifier's minimum safe load.

Matching Power Ratings

When choosing cabinets, ensure their **power handling matches or exceeds** the amplifier's output power. Underrated speakers can be damaged by overpowering.

We recommend the following Hartke cabinets for optimal performance:

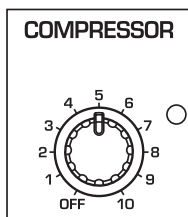
- **HyDrive Series:** HD112, HD115, HD210, HD410
- **XL Series:** 210XL, 410XL

Of course, any properly rated bass cabinet that suits your playing style may be used.

Typical Impedance Calculations

Cabinet Combination (Parallel)	Total Impedance
$16\Omega + 16\Omega$	8Ω
$8\Omega + 16\Omega$	5.3Ω
$8\Omega + 8\Omega$	4Ω
$8\Omega + 16\Omega + 16\Omega$	4Ω
$16\Omega + 16\Omega + 16\Omega + 16\Omega$	4Ω
$4\Omega + 8\Omega$	2.7Ω
$4\Omega + 4\Omega$	2Ω

About Compression



The **dynamic range** of a sound is the difference between its loudest and softest levels. When playing bass, you may notice that certain notes—such as those on the upper frets of the lowest string—sound significantly louder than others. The compression circuitry in the TX7500 is designed to **reduce overall dynamic range** by automatically lowering the level of louder notes so they sit closer in level to the softer ones. The result is a smoother, more even sound.

The front-panel **COMPRESSOR** control determines how much compression is applied by adjusting the **threshold**—the level above which compression begins. Turning the COMPRESSOR knob clockwise **lowers the threshold**, causing compression to engage more easily. The compression ratio is approximately **2:1**, meaning that any input signal exceeding the threshold is reduced to half its level.

The TX7500's compressor tracks your playing dynamics and automatically **reduces the compression ratio on fast-attack notes** to prevent excessive “squashing” of your tone. This is especially useful for staccato or fast rhythmic passages, helping every note stay consistent in level even when played aggressively.

The TX7500 provides a front-panel **compression indicator LED**:

- **Green** indicates the signal is below the compression threshold
- **Yellow** indicates the signal has exceeded the threshold and is being increasingly compressed as the control is turned clockwise
- When the COMPRESSOR knob is fully counterclockwise (OFF), the LED remains unlit

Why Use Compression?

Compression serves three primary functions:

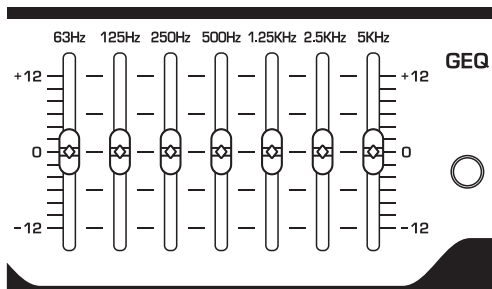
1. **Leveling your playing dynamics**
It helps ensure that all notes—soft or loud—remain consistent in level.
2. **Adding punch and clarity**
With peaks under control, you can dig in harder without worrying about distortion, resulting in a more powerful and articulate sound.
3. **Protecting your speakers**
Compression reduces sudden, high-level transients that can occur during techniques such as slapping or finger-popping.

Whether you choose to use compression with your TX7500 depends on your taste and playing style. If you typically perform at low volume levels, you may find that the compression circuit has little or no audible effect—even with the knob turned up. As a general rule, if you do not need compression, leave it off.

About Equalization

To understand how each band of the **7-band graphic equalizer** affects your bass tone, begin by setting **all sliders to their detented center “0” position**. Then, raise and lower each band individually while listening carefully to how it changes your sound. This is the best way to learn how the EQ interacts with your specific instrument and playing style.

If you do not need the graphic EQ, you can bypass it by setting the **EQ In/Out switch** to the “**Out**” position (backlight off).



Alternatively, you can preset a custom EQ curve—for example, for a featured solo—and simply press the switch to enable it when needed.

Keep in mind that **raising all EQ sliders equally** functions much like increasing the Master Volume, while **lowering them all equally** is similar to decreasing it. Since the TX7500 already provides a Master control, boosting or cutting every band together serves no real purpose.

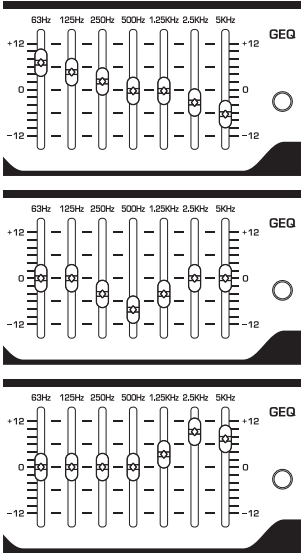
Tips for Effective EQ Use

Often, the best approach is to think in terms of **cutting** problem frequencies rather than boosting others. Boosting a frequency area increases overall signal level, and excessive low-frequency boost can cause distortion or potentially damage your speakers. The TX7500's compression circuit can help limit these peaks, but if you plan to apply significant low-frequency boost, it's wise to keep **Compression** engaged for added protection.

Your ideal EQ settings will depend heavily on your instrument, musical style, and personal taste. However, here are some general suggestions:

Common EQ Approaches

- **Deep Reggae / Motown Tone**
Slightly boost low frequencies and attenuate the highest frequencies. Keep midrange frequencies flat or slightly reduced as shown in the illustration.
- **Removing “Boxiness” / Hi-Fi Sound**
Reduce midrange frequencies while leaving low and high frequencies flat.
- **Twangy or Cutting Tone**
Boost high and upper-mid frequencies.
(Fresh roundwound strings help emphasize this tone even more.)



Whenever you find an EQ setting that works well for a specific instrument or song, **write it down**—it's surprisingly easy to forget the details. Finally, remember that your bass itself includes tone controls, which can be extremely effective, especially on instruments equipped with active electronics. Experiment with different EQ combinations, Pre-Amp blends, and Compression settings to find your ideal sound.

Specifications

Continuous Average Output Power	800 watts @ 4 ohms 525 watts @ 8 ohms
Input	>1M Ω unbalanced
Compressor Ratio	Fixed 2:1
Compressor Threshold	Off to -30dBu
Mute Switch	>80dB (100dB typical) at Direct Output & Speaker Output
Shape Switch	Signature Hartke Sound
Brite Switch	+12dB@10kHz
7-Band Graphic EQ	+/-12dB center dented @63Hz, 125Hz, 250Hz, 500Hz, 1.25kHz, 2.5kHz, 5kHz
Bass Control Knob	+/-10dB @ 25Hz
Treble Control Knob	+/-10dB @ 10kHz
List of all these are all switches	Active, Shape, GEQ, Brite, Mute, Pre/Post, Ground/Lift, AC Voltage Selection100-120V/220-240V and Power
FX Loop Send	200 Ω impedance balanced
FX Loop Return	18k Ω balanced, +5.5dBu for Rated Output Power
Tuner Output	1k Ω unbalanced
Direct Output	260 Ω balanced
Dimensions	14" x 12" x 3" (355mm x 300mm x 73mm)
Weight	8.5lbs (3.85kg)

At Hartke, we are continually improving our products, therefore specifications and images are subject to change without notice.

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